DOCUMENT RESUME

ED 174 700 UD 019 595

AUTHOR	Shaw, Lois B.
TITLE	Does Living in a Single-Parent Family Affect High School Completion for Young Women?
INSTITUTION	Ohio State Univ., Columbus. Center for Human Resource Research.
SPONS AGENCY	Employment and Training Administration (DOL), Washington, D.C.
PUB DATE	Mar 79
NOTE	24p.
AVAILABLE FROM	Library, Center for Human Resource Research, 5701 North High Street, Worthington, Ohio 43085 ($0.80)
EDRS PRICE	MF01/PC01 Plus Postage.
DESCRIPTORS	*Academic Achievement; Blacks; Caucasians; *Dropout Characteristics; Dropouts; *Family Characteristics; Fatherless Family; *Females; Heads of Households; Mothers; *One Parent Family; *Racial Differences; Secondary Education; Socioeconomic Status

ABSTRACT

A sample of mothers and daughters from the National Longitudinal Surveys of Labor Market Experience is examined to find out whether living in a one parent family has any effect on the chances of a daughter's completing high school. The sample is limited to mothers and daughters living in the same household during the initial sample screening in 1968. Three measures of family stability are given: the percentage of families ever headed by one parent; the percentage of families headed by one parent for at least two years; and the percentage of families headed by one parent at any time during the years when the daughter was aged 14 to 18. Average family income and number of siblings are also shown. Multiple regression analysis shows that failure to complete high school varies due to a number of factors, including length of time ever lived in a one parent family; level of family income during the high school years; educational level of mother; and knowledge of the world of work. It is found that low income is the single most significant factor in accounting for the probability of a daughter dropping out of high school, both for whites and blacks. (Author/MC)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED174700

Center for Human Resource Research
College of Administrative Science
The Ohio State University

Does Living in a Single-Parent Family Affect High School Completion for Young Women?

by

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
M. E. Borus
Cntr. for Human Resource Research
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Lois B. Shaw
Center for Human Resource Research
The Ohio State University
Columbus, Ohio

March 1975

The author wishes to thank Stephen M. Hills, Tom Daymont, and Gilbert Nestel for their helpful comments and Pat Rhoton and Theresa Baker for their expert research assistance.

This paper was prepared under a contract with the Employment and Training Administration, U.S. Department of Labor, under the authority of the Comprehensive Employment and Training Act. Researchers undertaking such projects under Government sponsorship are encouraged to express their own judgements. Interpretations or viewpoints stated in this document do not necessarily represent the official position or policy of the Department of Labor.

UD019595

In recent years the percentage of children who spend part of their childhood in single-parent families has increased dramatically. In the six years between 1970 and 1976, the percentage of white children under 18 who lived in such families increased from 9 to 13 percent. For black children the increase was even greater -- from 32 to 42 percent (U.S. Bureau of the Census, 1978). These figures refer to a particular point in time; they therefore understate the percentage of children who will at some time have the experience of living without one or both of their parents. According to one estimate (Bane, 1976), approximately 40 percent of all children born in the 1970s will at some time live in a single-parent family, on average for a period of five years.

The effect on children of living in broken homes has been the subject of much debate. Increased juvenile deliquency, poorer school achievement, lower occupational attainment and future marital instability are possible outcomes that have been investigated with generally inconclusive results. In their review of this research, Ross and Sawhill (1975) note several inadequacies of data or methodology that may account for some of the differing findings. These include, first, the scarcity of longitudinal data sets in which the consequences of living in different family arrangements may be observed over an extended time period; second, inadequate models of child development and of measures of the amount and quality of parent-child interactions; and third, inadequate controls for family income and socioeconomic status.

The present study examines one of these areas of research, the effect of living in a single-parent family on the educational attainment of young women, as measured by whether they complete 12 years of school. In

this specific area the evidence is again mixed. Studies that have found that living in a single-parent family affects educational attainment include Duncan (1967), Masters (1969), Hauser and Featherman (1975), and Waite and Moore (1978). McNally (1977) found that girls, but not boys, from broken homes were less likely to finish high school than were their counterparts from intact families. Other researchers who found no effect include Hanushek (1972), who reanalyzed the Coleman report data, and McDonald and Stephenson (1977), who used data from the Gary Income Maintenance Experiment. However, Hanushek used aggregate data only and McDonald and Stephenson used data from only one locality, while all of the studies that found some effect used national surveys of individuals.

All of the studies, however, have some of the defects noted by Ross and Sawhill. Since women whose marriages end often experience substantial decreases in income (Shaw, 1978; Mott and Moore, 1977), it is important to determine whether it is the low income or some other aspect of living in a single-parent family that affects children's educational attainment. Although all of the studies used some kind of control for socioeconomic status, only Masters and McDonald and Stephenson controlled specifically for family income during the high school years. A second limitation is that, except for the study by Duncan, none had access to parental marital history. Therefore, parental marital status was measured at one point in time only. Effects of living in a single-parent home at other times were not examined. Finally, much of the concern about the effects of living in a one-parent family has focused on sons. Of the studies cited above, Duncan and Hauser and Featherman studied only males, while Masters considered both sexes jointly. However, as already noted, McNally found

larger effects on girls than on boys. Therefore, more attention toward the effects on young women seems warranted.

A major purpose of the present paper is to determine whether living in a single-parent family exerts any effect on the chances of a daughter's completing high school beyond the effect that low income may have. Whether she lives with both parents or only one, low income may well cause a young woman to consider full-time work or marriage as an escape from poor economic circumstances. However, living in a single-parent home may affect the chances of high school completion in other ways as well. Because the single parent must often fill both breadwinner and homemaker roles, a daughter living in a one-parent family may receive less parental attention than her counterpart in an intact family. Furthermore, she herself may have major household responsibilities. Adjusting to the absence of a parent and in some cases to the presence of a step parent may involve emotional strain. In some communities stigma may still be attached to female-headed families, especially if the mother is divorced, and this may be reflected in the response of neighbors, schools and other organizations to the problems of children in such families (Brandwein, Brown and Fox, 1974). Finally, early childbearing, one of the most important reasons that young women themselves give for dropping out of school, occurs more frequently among daughters in single-parent families than among those in intact families (Moore and Hofferth, 1978). Moore and Hofferth suggest that lack of a father to play the traditional supervisory role may contribute to this result.

Policy implications for alleviating possible adverse effects of marital disruption on the education of young women will differ depending on whether

the economic or other aspects of living in a broken home are more important. If low income is of primary importance, then training for displaced homemakers, enforcement of child support decrees, and better income maintenance programs for both intact and one-parent families may be indicated. If broken homes have additional effects on educational attainment beyond an income effect, then other programs such as counselling, child care and other services for single-parent families might prove to be beneficial.

Description of the Data to be Used

To overcome some of the limitations of past research, the present study uses a unique data source, a sample of mothers and daughters from the National Longitudinal Surveys of Labor Market Experience (NLS). The sample is made up of families in which a mother was interviewed in the Survey of Mature Women and a daughter in the Survey of Young Women.[1] It is therefore possible to obtain from interviews with the mother her marital history, education, and information on family income during the years the daughter was of high school age. So that family income during high school can be determined, only young women who were 14 to 16 years of age at their first interview in 1968 are included in the sample. Women who had not completed 12 years of school and were not enrolled in school in 1973 are considered to be high school dropouts. The sample, defined in this way, consists of 436 white and 211 black women of whom about 14 percent of the white women and 38 percent of the black women had not completed high school.[2]

Since the sample is limited to mothers and daughters who were living in the same household during the initial sample screening, daughters living

with their fathers or other relatives can be expected to be underrepresented.[3] In fact, only two percent of both the black and white young women who were not living in intact families at age 14 lived with their fathers, while five percent of the white women and eight percent of the black women lived with neither parent.[4] Therefore, conclusions reached in this paper apply, for the most part, to the effect on daughters of living in a female-headed family.

A number of characteristics of the sample are shown in Table 1.

TABLE 1

Selected Characteristics of Families of Young Women, Age 14-16 in 1968

	WHITE	BLACK
	Percentages	
Ever Single-Parent Family	17.9	41.7
Single-Parent 2 or More Years	11.5	37.0
Single-Parent While Daughter was 14-18 Years Old	12.2	37.9
Mother Did Not Complete High School	34.2	75.4
	Means	
Average Family Income[a]	$11,028	$5,288
Number of Siblings	3.2	5.7
Sample Size	n = 436	n = 211

[a]Average total family income for 1966, 1968 and 1970, in 1967 dollars.

Three measures of family stability are shown: first, the percentage of families that were ever headed by a single parent; second, the percentage of families that were headed by a single parent for at least two years;

and third, the percentage of families that were headed by a single parent at any time during the years when the daughter was aged 14 to 18.[5]

In about 18 percent of white families, but in over 40 percent of black families, the daughter lived with only one parent at some time during her childhood or adolescence.[6] Not only was a black daughter much more likely to have lived in a single-parent family at some time, she was also much more likely than a white daughter to have lived with one parent for an extended period. In fact, in about one-third of the white families, single-parent status lasted less than two years, while in only about one-tenth of the black families was the time spent in a single-parent family so short.

Over one-third of the white mothers and about three-fourths of the black had not completed 12 years of school. By comparison, the 1970 Census reports that about 60 percent of black women in approximately the same age range had completed less than 12 grades in that year (U.S. Bureau of the Census, 1973b). This suggests that the black sample may be of slightly lower socioeconomic status than the national average.[7]

Daughters in white families had, on average, three siblings, while those in black families had five to six. Although these numbers may at first appear to imply family sizes well above the average of slightly over three children per family in the baby boom years when these girls were born, it should be noted that the average number of children born per woman is generally smaller than the average family size per child.[8]

Analysis

Table 2 shows the percentage of daughters who did not complete high school by different kinds of marital history of the mother. It can be

seen that both white and black daughters who have always lived with both parents are considerably more likely to complete high school than are daughters who have lived with a single parent at some time. Young women who live for two or more years in a one-parent family have higher drop-out rates than do those who live in a one-parent family for a shorter period. Living in a single-parent family during the usual high school years does not appear to have a greater effect than does living in a single-parent family at other times.

TABLE 2

Percentage of Young Women Who Did Not Complete High School by Mother's Marital History

Mother's Marital History	WHITE		BLACK	
	Percent	Sample Size	Percent	Sample Size
Always Intact Family	12.6	(358)	32.5	(123)
Ever Single-Parent Family	21.8	(78)	46.6	(88)
Single-Parent Less Than 2 Years	17.9	(28)	-[a]	(10)
Single-Parent More Than 2 Years	24.0	(50)	50.0	(78)
Single-Parent While Daughter Was 14-18 Years Old	20.8	(53)	46.3	(80)
Total	14.2	(436)	38.4	(211)

[a]Percentage not shown when sample size is less than 25.

Failure to complete high school also varies by family income during the high school years, as shown in Table 3. For both whites and blacks, the dropout rate is highest at low income levels and decreases steadily

as income increases. At low levels of income, dropout rates of black women are higher than those of white women, but in the $5,000 to $10,000 range, the rates of the two groups are equal.

TABLE 3

Percentage of Young Women Who Did Not Complete High School by Family Income

Average Family Income[a]	Percentages	
	WHITE	BLACK
Less Than $5,000	28.9	50.4
$5,000 - 9,999	22.2	21.9
$10,000 - and Over	5.7	-[b]

[a]Average total family income for 1966, 1968, and 1970, in 1967 dollars.

[b]Percentage not shown when sample size less than 25 cases.

In Table 4 multiple regression analysis is used to examine the relative effects of family income and other aspects of family instability while controlling for additional factors that may affect the chances of high school completion. The dependent variable is dichotomous, taking a value of one if a daughter failed to complete high school and zero otherwise. In addition to family income and the measures of mother's marital history previously described, the other independent variables include mother's education, number of siblings as reported by the daughter, residence in the South, residence in an SMSA, and a score that measures the daughter's knowledge of the world of work. This last variable is used as a proxy for verbal ability.[9]

TABLE 4

The Probability of Dropping Out of High School for Young Women Ages 14-16 in 1968: Regression Results[a]

Independent Variables[b]	WHITES[c]			BLACKS[c]		
	(1)	(2)	(3)	(1)	(2)	(3)
Ever Single Parent	.0495 (1.21)		.236*** (2.63)	.107* (1.50)		.203* (1.44)
Single Parent More Than Two Years		.0608 (1.22)			.142** (1.88)	
Single Parent Less Than Two Years		.0306 (.48)			-.0850 (-.54)	
Average Family Income (Thousands of Dollars)	-.00599*** (-2.25)	-.00585** (-2.17)	-.00424* (-1.54)	-.0279** (-1.93)	-.0222* (-1.48)	-.0204 (-1.18)
Interaction Term: Income X Ever Single Parent			-.0221*** (-2.34)			-.0187 (-.79)
Mother Did Not Complete High School	.179*** (5.13)	.180*** (5.14)	.183*** (5.25)	.0740 (.91)	.0854 (1.05)	.0741 (.91)
Number of Siblings	.0218*** (2.95)	.0218*** (2.95)	.0222*** (3.03)	.00235 (.20)	.00461 (.40)	.00255 (.22)
Knowledge of the World of Work: Total Score	-.0141** (-1.66)	-.0137* (-1.60)	-.0124* (-1.46)	-.0394** (-2.24)	-.0395** (-2.25)	-.0399** (-2.27)
South	.0984*** (2.86)	.0991*** (2.87)	.0930*** (2.71)	-.0458 (-.52)	-.0456 (-.52)	-.0384 (-.44)
SMSA	.0502* (1.61)	.0503* (1.61)	.0457* (1.47)	.0139 (.18)	.00643 (.09)	.0104 (.14)
Constant	.113* (1.38)	.108* (1.30)	.0818 (.99)	.641*** (3.31)	.590*** (3.00)	.594*** (2.93)
R^2 (Adjusted)	.17	.17	.18	.08	.08	.08
F Ratio	14.04	12.28	13.10	3.49	3.31	3.13

* Significant at the .10 level, 1 tailed t-test.
** Significant at the .05 level, 1 tailed t-test.
***Significant at the .01 level, 1 tailed t-test.

[a]The dependent variable is a dummy variable assuming the value of one if the daughter had completed less than 12 years of schooling by 1973.

[b]For full descriptions of independent variables used, see Appendix.

[c]White Sample: 436 mother-daughter pairs from the NLS surveys of 1967-1973.
Black Sample: 211 mother-daughter pairs, same survey years.

In Equation (1), the measure of family instability is a dummy variable that takes the value of one if the family was ever headed by a single parent and zero otherwise. For white daughters, after controlling for family income, other effects of living in a single-parent family are not large enough to be statistically significant. Low income, by itself, does significantly increase the risk of dropping out of high school. However, the mother's failure to complete high school is by far the most significant variable in the equation. Daughters whose mothers did not complete high school have a dropout probability that is nearly 20 percentage points higher than that of girls whose mothers were graduates. Coming from a large family, residence in the South, and a low score on the knowledge of the world of work variable all significantly increase the chances that a white woman will not complete high school.

For black daughters, low family income also significantly decreases the chances of completing high school. However, unlike the result for white daughters, there is some indication that other effects of living in a one-parent family are important after controlling for the effect of low income. In sharp contrast to the strong effect of a white mother's high school completion on the chances that her daughter will complete, a black mother's educational attainment appears to have no effect on that of her daughter. Knowledge of the world of work is significant, but, surprisingly, neither number of siblings nor residence in the South appears to affect the dropout rate of young black women.

In Equation (2) the effects of spending different amounts of time in one-parent families are shown. The results suggest that short periods of living in a one-parent family have little effect on a daughter's high school

completion. For black women, the effect of living in a one-parent family for at least two years is clearly significant after controlling for income, but for white women it is doubtful whether there is any effect.[10]

In Equation (3) an interaction term, in which the single-parent dummy is multiplied by average family income, is used to determine whether living in a single-parent family has the same impact at high and low levels of income. The interaction term is significant for whites, indicating that the effects of living in a single-parent family do indeed differ between low and high income families. For blacks, it may be that the limited number of observations in the high income range prevents our observing a similar result. This model implies that, at least for white women, at low levels of income both the low income itself and other aspects of living in a single-parent family lead to increased rates of dropping out of school. However, at high levels of income, living in a single-parent family ceases to have any effect on the probability of completing high school.

Table 5 illustrates these results. The probabilities of a daughter's dropping out of high school are shown for different levels of income and for both intact and single-parent families.[11] For both white and black girls, it is only at low levels of income that living in a one-parent family has a large impact on the probability of completing high school. At incomes above $11,000 per year (approximately the mean income for white families), the gap between daughters in intact and broken homes disappears completely. Therefore, we can conclude that if a single-parent family is able to obtain a reasonably adequate level of income, either through the mother's employment or other means, a daughter is no more likely to drop out of school than her counterpart in an intact family.

TABLE 5

Probability that a Daughter Will Not Complete High School by Income Level, and by Mother's Education and Marital History[a]

Average Family Income	Mother Did Not Complete High School		Mother Did Complete High School	
	Always Intact Family	Ever Single-Parent Family	Always Intact Family	Ever Single-Parent Family
	WHITE			
$3,000	.22	.39	.04	.21
7,000	.21	.29	.03	.11
11,000	.19	.18	.01	.00
	BLACK			
$3,000	.32	.47	.25	.40
7,000	.24	.31	.17	.24
11,000	.16	.15	.08	.08

[a]Calculated from Equation (3), Table 4.

That mother's education strongly affects the high school completion of white, but not black, daughters is again demonstrated in Table 5. This difference may be related to the fact that high school graduation was relatively uncommon among black mothers in the sample, while for white mothers it was the norm. It may be that daughters of white women graduates were more likely than those of black graduates to have fathers and other relatives who had also completed school and to live in neighborhoods where dropping out was uncommon. Whatever the cause of the difference, the result is that in low income families black daughters of high school graduates are as likely to drop out of school as are white daughters whose mothers did not graduate.

Conclusions

In order to see whether the greater probability of a daughter's failing to complete school if she comes from a broken home is due to the inadequate income that commonly accompanies marital disruption, or to some other aspect of living in a one-parent family, a sample of mothers and daughters was studied during the years when the daughter was of high school age. The evidence suggests that the income effect of living in a single-parent family is of primary importance. However, both income and other factors associated with living in a nonintact family increase the chances of dropping out of school for daughters in low income families headed by a single parent, usually the mother. In high income families, living with one parent has no effect on the chances that a daughter will fail to complete high school.

In future research it will be important to determine what aspects of living in a low-income, single-parent family affect the educational attainment of daughters. The reasons given by the young women themselves for quitting school may offer clues for further investigation. Mott and Shaw (1978) found that in the entire NLS sample about 5 percent of white women and 8 percent of black gave work-related reasons for leaving, while the percentages that reported not liking school were 20 and 9 percent for white and black women respectively. However, the majority of both races gave either marriage or pregnancy as the reason for leaving. It may be that young women in female-headed families have more responsibilities and less parental supervision than do those in homes with a father. They may then try to escape from poverty in a home where much is expected of them by starting a home of their own.[12]

These considerations suggest that schools, government programs and other agencies that serve low-income neighborhoods should give special attention to the needs of girls who come from broken homes. However, programs to increase the employability of women who head families and to improve income adequacy through welfare reform are essential in any effort to improve high school completion rates. The fact that girls in single-parent families with average or above-average income do not appear to have increased chances of dropping out of school suggests that one parent alone can raise children quite adequately, given good economic circumstances.

Footnotes

[1]The Survey of Mature Women is a national sample of women who were age 30-44 in 1967. This group has been reinterviewed in 1969, 1971, 1972, 1974, 1976 and 1977. The sample of young women was drawn from the same screening sample. These women were first interviewed in 1968 when they were age 14-24. They were reinterviewed yearly through 1973 and in 1975, 1977 and 1978. For a complete description of the NLS surveys see "The National Longitudinal Surveys Handbook," Center for Human Resource Research, Ohio State University.

[2]Excluded from the sample were 17 cases in which young women were still enrolled in high school in 1973, 5 with mother's marital history missing for part of the period, and 23 with no income information. About 16% of the daughters had siblings who were also in the sample. When I randomly excluded sibling-mother pairs, leaving only one mother-daughter pair from the family in the sample, the results did not change substantially.

[3]The sample, although drawn from the entire population of the U.S., is not representative of the 14-16 year old population in some other respects as well. In particular, since the mothers were constrained to be age 31-45 in 1968, they were all less than 32 years old when their daughters were born. This means that younger children in large families are underrepresented as are children of older mothers generally.

[4]Comparable national figures for children 14-17 in nonintact families in 1970 were; for white children 13 percent with the father only and 24 percent with neither parent; for black children 7 percent and 26 percent respectively (U.S. Bureau of the Census, 1978). For convenience, I will use "single-parent family" to refer to all cases in which the daughter was not living with two parents. Less frequently, for variety, I will use the terms "broken home" and "marital disruption," although these terms do not adequately describe families in which the single parent is an unmarried mother (less than 5 percent of single parents in the sample) or a widow (20 percent).

[5]It would have been desirable to incorporate more data on length and timing of the disruption. However, a high percentage of missing data on dates of disruption and remarriage caused the loss of too many cases when exact measures of length and time of disruption were required. It was usually possible to determine whether a disruption was relatively long, as here defined, without knowing the exact duration of the disruption.

[6]These figures for the probability of a daughter ever living in a single-parent faimly are slightly lower than those computed by Bumpass and Rindfuss (1978) using data from the 1973 Family Growth Survey for children born in 1956-58. For children born in those years, they calculated probabilities of 21 percent and 51 percent for white and black children respectively. Since the NLS sample were born in 1952-54 and divorce rates have been rising rapidly, our data appear to agree with theirs reasonably well.

[7]The black sample is also more heavily concentrated in the South than is the population of black women 14-16 years old in the 1970 Census: 72 percent of the mother-daughter sample, as compared with only 56 percent of young black women in the 1970 Census lived in the South (Bureau of the Census, 1973a).

[8]Indeed, Preston (1976) has estimated that the average child born during the early baby boom years grew up in a family of slightly over four children, very close to the average for the white sample. Black families can be expected to be substantially larger.

[9]The Knowledge of the World of Work variable may be a proxy for verbal ability in the following sense: standardized IQ scores and occupational knowledge scales are very highly correlated statistically, see Parnes and Kohen, 1975, p. 48. Roderick and Davis (1974) show in tabular form (p. 56) that as IQ increases, knowledge of the world of work increases, and vice versa, for both black and white young women.

[10]A third measure of family stability, whether or not the daughter lived in a single-parent family during her high school years, was also tried. The results were similar to the measure for ever living in a single-parent home at any time. This similarity implies that the timing of the disruption is less important than the other effects of the disruption on the probability of completing high school.

[11]Probabilities shown are calculated from Equation (3), Table 4 for young women who have three siblings, whose score on Knowledge of the World of Work was 6, and who resided in an SMSA outside the South.

[12]Literature on this point is largely impressionistic; see, for example, Ladner (1971). The author was impressed when talking to a group of young women in a CETA program with the frequency of mention of their heavy duties in the parental home as a reason for starting their own families. Apparently they preferred the problems of having their own children to the alternative of responsibility without independence.

APPENDIX

VARIABLE DESCRIPTIONS

The dependent variable is:

a dummy variable which assumes a value of one if the young woman has not graduated from high school (i.e., has completed eleven years or less of school) as of 1973, or assumes a value of zero if she has graduated (i.e., completed at least twelve years of school) as of 1973;

The independent variables are:

Ever Single-Parent	a dummy variable which assumes a value of one if the mother's marriage has ever been disrupted at any time, zero otherwise;
Single-Parent Less Than 2 Years	a dummy variable assuming the value of one if the length of the parental marital disruption is determined to be less than 2 years, zero otherwise. The reference group for this group and the more-than-2-year group is those whose marriages were never disrupted;
Single-Parent More Than 2 Years	a dummy variable which assumes a value of one if the mother's marriage has been disrupted for two or more years, or assumes a value of zero if the marriage had been disrupted less than two years;
Average Family Income	a measure of the family's permanent income, composed of the sum of total family incomes (from as many years as are available of the three years 1966, 1968 and 1970), divided by the number of years, where all incomes are deflated to 1967 dollars;
Interaction Term	an interaction term multiplying the ever single parent dummy times the income figure described above;
Mother Did Not Complete High School	a dummy variable which assumes a value of one if the mother has not graduated from high school as of 1967 (i.e., completed eleven or less years of school), or zero if the mother has finished at least 12 years of school as of 1967;
Number of Siblings	the number of siblings claimed by the daughter in 1968;
Knowledge of the World of Work	an index measuring the daughter's knowledge of the world of work in 1969 (see Roderick and Davis, 1974);

South	a dummy variable assuming the value of one if the daughter resided in one of three Southern Census Regions in 1968, zero if she lived elsewhere;
SMSA	a dummy variable which assumes a value of one if the daughter's residence is in a Standard Metropolitan Statistical Area in 1968, zero if elsewhere.

References

Bane, Mary Jo. "Marital Disruption and the Lives of Children." Journal of Social Issues (Winter 1976).

Brandwein, Ruth A.; Brown, Carol A.; and Fox, Elizabeth Maury. "Women and Children Last: The Social Situation of Divorced Mothers and Their Families." Journal of Marriage and the Family 36 (August 1974): 498-514.

Center for Human Resource Research. "The National Longitudinal Surveys Handbook." Mimeographed. Columbus: The Ohio State University, 1977.

Duncan, Beverly. "Education and Social Background." American Journal of Sociology 72 (January 1967): 363-72.

Hanushek, Eric A. Education and Race. Lexington, Mass.: Lexington Books, 1972.

Hauser, Robert M., and Featherman, David L. "Equality of Access to Schooling: Trends and Prospects." University of Wisconsin, Center for Demography and Ecology, Working Paper 75-17, 1975.

Ladner, Joyce A. Tomorrow's Tomorrow. New York: Doubleday and Co., 1971.

Masters, Stanley H. "The Effects of Family Income on Children's Education: Some Findings on Inequality of Opportunity." Journal of Human Resources 4 (Spring 1969): 158-75.

McDonald, John F., and Stephenson, Stanley P. "Income Maintenance and the School-Enrollment and Labor-Supply Decisions of Teenagers." Mimeographed. Gary: Indiana University Northwest, 1977.

McNally, Kathleen V. "Estimation of Academic Attrition Behavior: An Analysis of Predictors of High School Dropout Behavior in the United States." Ph.D. dissertation, Columbia University, 1977.

Moore, Kristin A., and Hofferth, Sandra L. "Factors Affecting Early Family Formation: A Path Model." Mimeographed. Washington: The Urban Institute, 1978.

Mott, Frank L., and Moore, Sylvia F. "Marital Disruption: Causes and Consequences." In Years for Decision Vol. IV. Columbus: The Ohio State University, Center for Human Resource Research, 1977.

Mott, Frank L., and Shaw, Lois B. "Work and Family in the School Leaving Years: A Comparison of Female High School Graduates and Dropouts." Mimeographed. Columbus: The Ohio State University, Center for Human Resource Research, 1978.

Parnes, Herbert S., and Kohen, Andrew J. "Occupational Information and Labor Market Status: The Case of Young Men." Journal of Human Resources 10 (Winter 1975): 44-55.

Preston, Samuel H. "Family Sizes of Children and Family Sizes of Women." Demography 13 (February 1976): 105-13.

Roderick, Roger D., and Davis, Joseph M. "Knowledge of the World of Work." In Years for Decision Vol. II. Columbus: The Ohio State University, Center for Human Resource Research, 1978.

Ross, Heather L., and Sawhill, Isabel V. Time of Transition: The Growth of Families Headed by Women. Washington: The Urban Institute, 1975.

Shaw, Lois B. "Economic Consequences of Marital Disruption for Women in Their Middle Years." Mimeographed. Columbus: The Ohio State University, Center for Human Resource Research, 1978.

U.S. Bureau of the Census. "Characteristics of the Population." Census of Population: 1970, vol. I, Part 1, U.S. Summary - Section 1. Washington: U.S. Government Printing Office, 1973, pp. 1-283, 1-285, (a).

U.S. Bureau of the Census. "Educational Attainment." Census of Population: 1970. Subject Reports, Final Report PC(2)-5B. Washington: U.S. Government Printing Office, 1973, pp. 39, 44, (b).

U.S. Bureau of the Census. "Characteristics of American Children and Youth, 1976." Current Population Reports, Series P-23, No. 66. Washington. U.S. Government Printing Office, 1978, p. 26.

Waite, Linda J., and Moore, Kristin A. "The Impact of an Early First Birth on Young Women's Educational Attainment." Social Forces 56 (March 1978): 845-64.

The Center for Human Resource Research

The Center for Human Resource Research is a policy-oriented research unit based in the College of Administrative Science of The Ohio State University. Established in 1965, the Center is concerned with a wide range of contemporary problems associated with human resource development, conservation and utilization. The personnel include approximately twenty senior staff members drawn from the disciplines of economics, education, health sciences, industrial relations. management science, psychology, public administration, social work and sociology. This multidisciplinary team is supported by approximately 50 graduate research associates, full-time research assistants, computer programmers and other personnel.

The Center has acquired pre-eminence in the fields of labor market research and manpower planning. The National Longitudinal Surveys of Labor Force Behavior have been the responsibility of the Center since 1965 under continuing support from the United States Department of Labor. Staff have been called upon for human resource planning assistance throughout the world with major studies conducted in Bolivia, Ecuador and Venezuela, and recently the National Science Foundation requested a review of the state of the art in human resource planning. Senior personnel are also engaged in several other areas of research including collective bargaining and labor relations, evaluation and monitoring of the operation of government employment and training programs and the projection of health education and facility needs.

The Center for Human Resource Research has received over one million dollars annually from government agencies and private foundations to support its research in recent years. Providing support have been the U.S. Departments of Labor, State, and Health, Education and Welfare; Ohio's Health and Education Departments and Bureau of Employment Services; the Ohio cities of Columbus and Springfield; the Ohio AFL-CIO; and the George Gund Foundation. The breadth of research interests may be seen by examining a few of the present projects.

The largest of the current projects is the National Longitudinal Surveys of Labor Force Behavior. This project involves repeated interviews over a fifteen year period with four groups of the United States population: older men, middle-aged women, and young men and women. The data are collected for 20,000 individuals by the U.S. Bureau of the Census, and the Center is responsible for data analysis. To date dozens of research monographs and special reports have been prepared by the staff. Responsibilities also include the preparation and distribution of data tapes for public use. Beginning in 1979, an additional cohort of 12,000 young men and women between the ages of 14 and 21 will be studied on an annual basis for the following five years. Again the Center will provide analysis and public use tapes for this cohort.

The Quality of Working Life Project is another ongoing study operated in conjunction with the cities of Springfield and Columbus, in an attempt to improve both the productivity and the meaningfulness of work for public employees in these two municipalities. Center staff serve as third party advisors, as well as researchers, to explore new techniques for attaining management-worker cooperation.

(Continued on inside of back cover)

A third area of research in which the Center has been active is manpower planning both in the U.S. and in developing countries. A current project for the Ohio Advisory Council for Vocational Education seeks to identify and inventory the highly fragmented institutions and agencies responsible for supplying vocational and technical training in Ohio. These data will subsequently be integrated into a comprehensive model for forecasting the State's supply of vocational and technical skills.

Another focus of research is collective bargaining. In a project for the U.S. Department of Labor, staff members are evaluating several current experiments for "expedited grievance procedures," working with unions and management in a variety of industries. The procedural adequacies, safeguards for due process, cost and timing of the new procedure are being weighed against traditional arbitration techniques.

Senior staff also serve as consultants to many boards and commissions at the national and state level. Recent papers have been written for the Joint Economic Committee of Congress, The National Commission for Employment and Unemployment Statistics, The National Commission for Manpower Policy, The White House Conference on the Family, the Ohio Board of Regents, the Ohio Governor's Task Force on Health, and the Ohio Governor's Task Force on Welfare.

The Center maintains a working library of approximately 6,000 titles which includes a wide range of reference works and current periodicals. Also provided are computer facilities linked with those of the University and staffed by approximately a dozen computer programmers. They serve the needs of in-house researchers and users of the National Longitudinal Survey tapes.

For more information on specific Center activities or for a copy of the Publications List, write: Director, Center for Human Resource Research, Suite 585, 1375 Perry Street, Columbus, Ohio 43201.